part of the time, but at no time was so sick or weak as to fail to come when called, except during a temporary withdrawal of the sirup as described later.

Effect on Development.—The most striking result of the experiment was the effect on the muscular and bony development of the dog receiving the sirup. There was an extreme softness and flabbiness of the muscles, comparable to the condition of a patient in the last stages of a serious illness. The bone development in Dog 1 was much less rugged than in Dog 2, especially noticeable in the narrowness across the chest and shoulders of the former as compared with the latter.

Effect of Discontinuing the Sweets.—During the last month of the experiment the sirup and sugar were discontinued for one week. Dog 1 became so ill as to refuse to leave her house or take food. On being given a laxative and resuming the sirup diet she soon became as well as before. The change in diet had no apparent effect on Dog 2.

At the end of six months the experiment was terminated. Dog 2 appeared so active and vigorous — and had at all times from the first — that the effect of the addition of the cane-sugar to the diet was considered negative.

PATHOLOGIC REPORT

In a post-mortem examination of Dog 1, the organs found to be mainly affected were the intestine, liver and kidneys. Sections of these organs, which were examined by Dr. John Funke, showed the following changes:

Intestine.—Necrotic areas, at some points reaching to the submucosa, involving the agminated and solitary lymphoid structures.

Liver.—An abundance of cellular infiltration of the interlobular and intralobular structures. Few normal liver-cells could be found; vacuolization of the protoplasm due to a deposit of fat within the liver cells. Clearly a beginning intralobular cirrhosis.

Kidney.—Many tubules lined with epithelium which is swollen, granular and blurred, at some points occluding the lumen of the tubules; evidences of irritation much less pronounced than in the liver.

SOME SUGGESTIVE FACTS

While sugar-cane products were scarcely used at all a hundred years ago, they are now used in enormous quantities, and their consumption is increasing faster than ever before. This fact alone certainly seems to require investigation since it indicates that these products differ in some essential way from other foods.

The theory that sugar-cane products are habit-forming is suggested by the following fact:

If a child is allowed all the candy it wants it will eat increasing quantities from day to day and will in time develop an enormous craving for sweets, largely to the exclusion of other foods. A habit is thus formed which will be difficult to break up since a withdrawal of the customary allowance of sweets is followed by a reactionary depression and craving.

The injurious effect of sweets on the teeth is a matter of such wide-spread observation and belief that it must have a foundation of truth, but has never been satisfactorily explained. Experimental attempts to demonstrate that sweets cause decay of the teeth by some local action in the mouth have given negative results; that this decay is due to their constitutional effect seems reasonable in the light of the serious lesions which they produce in the liver and intestines and their profound effect on nutrition, as shown by the foregoing experiment.

New Instruments and Suggestions

A NEW SIMPLE STETHOSCOPE

J. J. SINGER, M.D., ST. LOUIS
Assistant Physician to Outpatient Department, Washington University Hospital

The stethoscope which I have devised intensifies the audibility of sounds without changing their character. It consists of a set of resonators of different sizes, which are adapted to be detachably connected to a hollow, curved Y-tube that serves as a handle and also as a connection for the ear-pieces. The resonators are so constructed that they can be nested together and combined with a member which cooperates with a resonator of greater diameter to form a protecting cover for other resonators that are nested inside.

Each resonator, A, A^1 and A^2, is cup-shaped, with a flat top wall, and is preferably formed from metal, although some other suitable material which has a certain degree of resonance would do as well. The opening from the top wall of each resonator, 2*a*, communicates with opening 1*a* of the device *B*. The resonator is connected to the handle *B* in such a manner that it can be easily disconnected, thereby

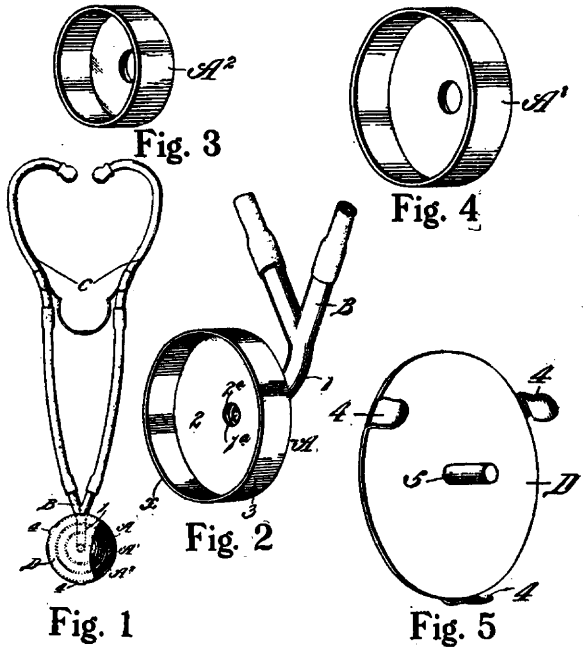

Fig. 3 Fig. 4 Fig. 2 Fig. 1 Fig. 5

Fig. 1.—View, front elevation, partly broken away, of the complete instrument.
Fig. 2.—Perspective view, showing the large resonator mounted in operative position with the combined handle and connecting member.
Figs. 3 and 4.—Perspective views of the smaller resonators.
Fig. 5.—Perspective view of the cover member.

enabling the same connecting member *B* to be used with different-sized resonators. When the rim of the cup-shaped resonator is placed in contact with the patient's chest, the air which is trapped inside of it is set in vibration by the vibration waves of the chest wall. These vibrations are taken up in unison by the resonator itself. Consequently, the sound waves are intensified and transmitted through the hollow connecting device *B* and thence to the ear-drums through the ear-pieces *C*.

The cap member, Figure 5, consists of a disk that is provided with several spring fingers that lap over the flange or rim of the large resonator, as shown in Figure 1, thus holding the cap member in position. This cap member is provided with a stud, or guide, in the center that projects through the center openings of the resonators, A^1 and A^2, and thus holds them in position in the enclosing shell, preventing them from rattling and moving around.

When the instrument is to be used, the cap member is removed and a resonator of the proper size is then secured to the connecting member *B*, the operator grasping the shank of the member *B* and using it as a handle to place the resonator in proper position on the body of the patient.

The small resonator, A^2, is especially adapted for auscultating children, localizing heart-murmurs, and in the auscultatory method of taking blood-pressure.

An instrument constructed as described above can be sterilized, because it has no parts that are damaged by water or excessive heat, such, for example, as the hard-rubber diaphragms of the stethoscopes now in general use, or as the hard-rubber bells. Friction sounds are largely eliminated, because only the lower edge of the side wall of the resonator comes in contact with the patient's body. Furthermore, this instrument overcomes the necessity of a physician owning a number of complete stethoscopes of different sizes, owing to the fact that it comprises a set of resonators of different sizes that can be stored compactly.

606-608 Carleton Building.

TABLE ATTACHMENT FOR DOING SURGERY ON FACE, THROAT AND NECK

WILLIAM M. HAYES, M.D., NEW ORLEANS

This apparatus is especially useful for cleft-palate work, enabling the operator to obtain a perfect Rose position (Fig. 1) without its being necessary for some one to support the head and shoulders. The head while in the basket portion can be turned from the right or left. The head and neck can be brought up or down as desired (Fig. 2).

For thyroid work it is ideal. Extension can be easily obtained and at the same time throws the thyroid gland up into view. This dispenses with the sand-bag placed under the back of neck. The head and neck are held firmly in position.

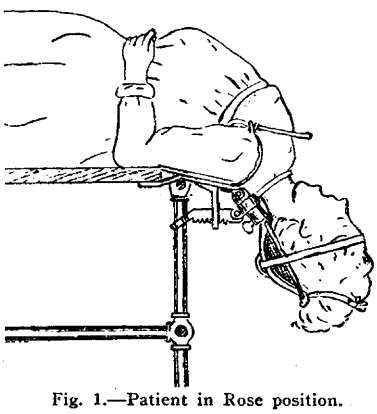

Fig. 1.—Patient in Rose position.

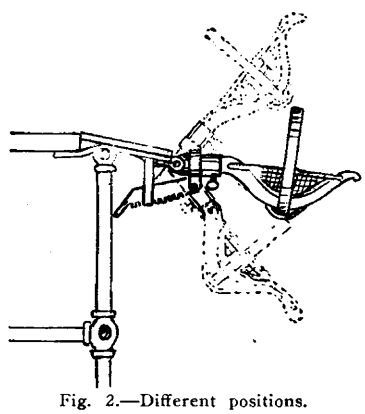

Fig. 2.—Different positions.

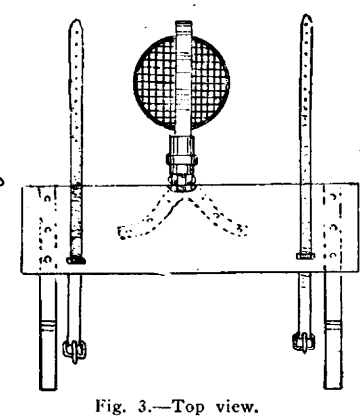

Fig. 3.—Top view.

The apparatus consists of a shoulder-plate the width of an operating-table. Attached to the under surface of the plate are two arms which go under the top of the table (Fig. 1). In each end of the plate is a slot through which passes a strap to go around the shoulders to support them.

A hinge-joint arrangement is attached to the under surface of the shoulder-plate, enabling the head and neck portion to be moved up or down as desired. The neck-piece is made of tubing which is fastened to the hinge-joint by a pin.

The basket portion is made of a piece of steel, which is curved to conform to the head (Fig. 1), and brass wire. The steel on which the basket proper is made ends in a stem which telescopes into the tubing which makes the neck portion.

A thumb- or set-screw as seen in Figure 1 holds the stem of the basket or head portion in the tubing. When the thumb- or set-screw is loosened, the stem rotates in the tubing right or left, or the neck portion can be made longer or shorter by pulling out or shoving back the stem into the tubing.

Around the tubing which makes up the neck-piece is a collar, to which is attached a notched lever which catches in a slot (Fig. 1). The slot is riveted to the under surface of the shoulder-plate. This notched lever is used to support the head and neck portion at any angle wanted (Fig. 2). A strap goes around the forehead if needed (Fig. 1). The strap is fastened to the basket and buckled over.

The anesthetist places the head and neck in any position desired by the operator.

1525 Calliope Street.

AN OPERATION FOR SHORTENING THE SCROTUM

R. L. RHODES, B.A., M.D., ROANOKE, VA.

Not infrequently associated with varicocele is a long, lax, pendent scrotum which in itself needs consideration, and unless dealt with properly these patients will not obtain complete relief from removal of the veins.

The operation most commonly employed is to clamp off and remove the redundant scrotum *en bloc*—the clamp being placed in such direction as is thought best.

The operation which I propose is not to use the clamp but to make the incision through the skin only, and this can then be readily dissected or stripped from the subcutaneous tissues. The incision may be elliptic, as when only one side of the scrotum is pendent, to shorten this side; or transverse, removing as much of the lower end of the scrotum as is desired; or following the line of the raphé extending on either side as wide as is desired. It may be closed in a straight line transversely or parallel with the raphé or in the shape of a cross (+) depending on the amount of skin denuded and the direction most desired to be abbreviated.

ADVANTAGES

1. It is an open operation with everything in full view of the operator, and therefore there is no possibility of doing any damage.
2. There is practically no bleeding—only a few oozing points which can be readily ligated.
3. It can be readily and painlessly done under a local anesthetic.
4. All the tissues beneath the skin are preserved. This is especially desirable as regards the dartos, which because of its elastic and muscle-fibers rapidly contracts following the operation, and forms a thicker, firmer and stronger support.
5. There is no postoperative discomfort.
6. The danger of postoperative hematoma is entirely eliminated because no large vessels are cut, and such as are cut are readily seen and ligated.
7. The scrotum is not opened, and therefore there is no possibility of carrying infection within—it being difficult thoroughly to cleanse and sterilize because of the tenderness of the scrotum.

A Simple, Practical Formaldehyd Sterilizer.—A sterilizer for certain diagnostic and dressing instruments, catheters, and paraphernalia that stand boiling poorly is not only a convenience but a necessity. The formaldehyd sterilizers on the market are efficient, look well, and are relatively expensive. I have found the following bread-box sterilizer satisfactory: A well-made box can be bought for less than a dollar; it should measure about 12 by 9 by 9 inches. Two sets of tin shelf-rests should be soldered in so that when the box rests on its back with its lid opening toward the front, the rests with their trays in place will give a three-compartment box. The trays are made from medium heavy ¼-inch wire mesh material which is faced and sided with tin. The total cost of this sterilizer will not exceed $2.50 instead of the customary $7 or $8. A box should be selected with a tightly fitting lid, if possible, but this defect can be somewhat overcome by the application of adhesive stripping around the narrow edge of the box over which the lid slips. The ventilation-holes should be covered with adhesive also. Powdered formaldehyd is exposed in a small dish which is set in the bottom compartment.

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